

Each of duplicated incoming line cards, connected to respective input ports of a self-routing switch, receives an incoming packet, determines an output port of the switch based on an address contained in the packet using routing information stored in a routing table, converts the packet into intra-node cells of fixed length and forwards the cells to the switch so that the cells are routed to the output port. Each of duplicated outgoing line cards, connected to output ports of the switch, receives intra-node cells from the switch, converts the cells into a packet, forwards the packet to an outgoing transmission line, and monitors the outgoing transmission line. A fault indication is sent to the incoming line cards if a fault condition is detected in the monitored line. Each incoming line card responds to this indication for updating its table so that traffic is routed to a normally operating outgoing line.